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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,568	02/27/2002	William C. Benavitz	A8130.0078/P078	5899
24998	7590	07/18/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP			DAWSON, GLENN K	
2101 L Street, NW			ART UNIT	
Washington, DC 20037			PAPER NUMBER	

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DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,568

Applicant(s)	
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BENAVITZ ET AL.

Examiner

Glenn K. Dawson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12-08-2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Thal-5569306.

Thal discloses that it was known to mold a suture anchor and suture and suture loop in one piece. See col. 8 lines 15-28. Fig. 12 –15 show the method of attaching tissue to bone using the suture anchor. Claim 1 is a product-by-process claim and the prior art meets the positively recited structural limitations. The anchor may be constructed with ribs:

Claims 8 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wenstrom-5814051.

Wenstrom discloses a suture driver having a cannulated shaft 30, and a cannulated handle 28, see fig. 3. At the distal end of the shaft is a recess 34 and slot 54. The slot receives the suture extending from the anchor.

Claims 8,11,12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Quinn, et al.-6893448.

O'Quinn discloses a device in fig. 2 having a cannulated shaft and handle. At the distal end of the shaft is a recess, either 20 or u-shaped recess into which 10 is able to reciprocate. The slot is either 24 or 22, or 20 in the event that the recess is the u-shaped section.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anspach-5102421 in view of Grafton, et al.-EP 0916312.

Anspach discloses that it was known to attach a suture to a suture anchor by thermal working of the anchor wall. The examiner contends that following this procedure, the resulting structure would be consistent with that of an insert molded suture anchor. However, in the event that this is not persuasive, the examiner contends that forming the suture anchor of Anspach by insert molding would have been obvious in view of Grafton's teachings (col. 2 lines 37-44) that as this provides an anchor which inhibits suture detachment and tissue abrasion and does not require countersinking.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thal-'306 in view of Grafton, et al.- EP 0916312.

Thal discloses the invention as claimed with the exception of the placing of the suture into a mold, pouring a polymer into the mold and causing the polymer to cure. Grafton discloses that it was known to insert mold a suture into an anchor by placing a suture into an injection mold, injecting a polymer into the mold, and causing the polymer to cure. It would have been obvious to have formed the molded suture anchor of Thal in

the manner disclosed by Grafton, as this decreases the possibility of the suture from being detached from the anchor.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Grafton, et al.-EP 0916312 in view of Cerier-'5100417.

Grafton discloses an insert-molded suture anchor and the method of forming it in the same manner as claimed. However, it is not specifically disclosed that the threads 6 are, or could be termed "ribs". The examiner contends that the threads are ribs, but in the event that this is not persuasive, it would have been obvious to have formed the anchor with ribs instead of threads, as taught by Cerier (col. 4 lines 40-43), as merely being different alternative equivalent means of bone engaging means on the anchor. One skilled in the art would have recognized the exchangeability of ribs for threads if for no other reason that it does not require torqueing to introduce it into the bone.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman-5591207 in view of Grafton, et al.-'312 and Cerier-'417.

Coleman discloses in fig. 12A-C a method of suturing tissue 322 with a suture, threading the suture through an eyelet of an anchor and attaching the anchor to bone. However, the driver and the insert-molded anchor are not disclosed. Grafton discloses that it was known to use an insert-molded suture anchor to attach tissue to bone. Cerier discloses that it was known to provide a driver for a suture anchor having a shaft with

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slots to receive the suture during driving into the bone. It would have been obvious to have used the anchor of Grafton instead of the Coleman anchor, as Grafton's anchor reduces the likelihood that the suture will become detached from the anchor and does not require countersinking and reduces tissue fraying. It would have been obvious to have used the driver of Cerier as this allows for a more secure attachment of the anchor to the driver during insertion into the bone. To have made the anchor with ribs instead of threads would have been obvious for the reasons noted in the rejection directly above.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn K. Dawson whose telephone number is 703-308-4304. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on 703-308-2154. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Glenn K Dawson
Primary Examiner
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Gkd
20 June 2005